



**Review of Dominion Energy South Carolina,  
Incorporated's 2021 Annual Update on  
Demand Side Management Programs and  
Petition for an Update to Rate Rider**

**Docket No. 2021-34-E**

South Carolina  
Office of Regulatory Staff

April 1, 2021

## Executive Summary

On January 29, 2021, Dominion Energy South Carolina, Inc. (“DESC” or the “Company”) filed its Annual Update on Demand Side Management (“DSM”) Programs and Petition to Update Rate Rider. The Company is requesting recovery of \$47,948,844 in this filing.

DESC’s amortized Program Costs, with carrying costs, constitutes \$29,164,781 or 61% of the total requested amount. Net Lost Revenues (“NLR”) is \$16,950,616 or 35% of the total requested amount, and \$1,833,447 or 4% of the total requested amount, is the amortized portion of the Company’s Shared Savings Incentive (“SSI”).

Due to the COVID-19 pandemic, the Company suspended most on-site visits in 2020 for all programs and has developed, whenever possible, mailings and virtual visits to replace the on-site visits. The Company continues to monitor the CDC guidelines to determine when on-site visits may continue.

Table 1 below compares the existing DSM rates to those currently requested by DESC:

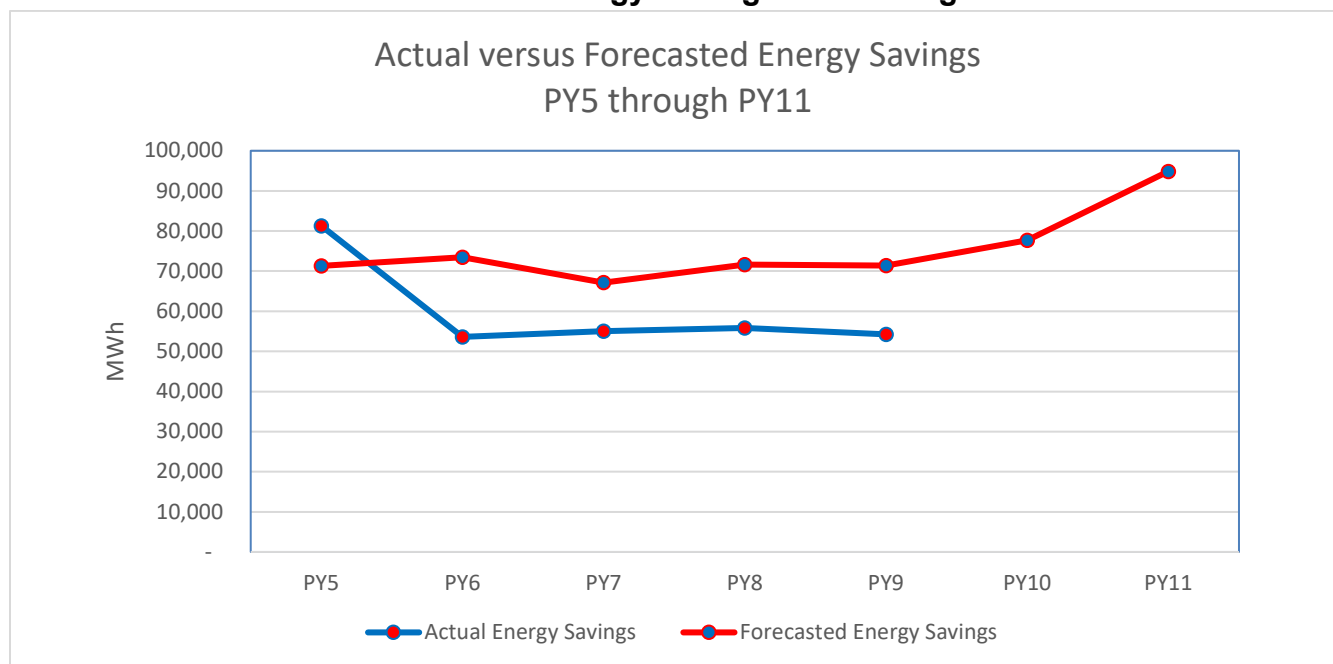
**Table 1: Previous and Requested DSM Rider**

DSM Rider Class	Approved 2020 Rate (¢/kWh)	Requested 2021 Rate (¢/kWh)
<b>Residential</b>	0.220	0.244
<b>Small General Service</b>	0.402	0.500
<b>Medium General Service</b>	0.261	0.307
<b>Large General Service</b>	0.116	0.131

The Company’s requested rate change would increase the bill of an average residential customer using 1,000 kilowatt hours (“kWh”) per month by approximately \$0.23.<sup>1</sup> According to the Company, the primary factor driving the increases in the DSM Rate Riders is the “vintaging of program costs,” which was approved in Commission Order No. 2019-880.

The Office of Regulatory Staff (“ORS”) has two (2) concerns. In recent years, after Program Year (“PY”) 4, the Company’s achieved energy savings have consistently been well below forecasted savings. Chart 1 below illustrates the energy savings shortfalls.

<sup>1</sup> The actual change in the DSM factor equates to a \$0.24 per month increase in the 1,000 kWh residential electric bill, but the application of the Tax Rider approved in Commission Order No. 2018-804 reduces the impact to a \$0.23 increase.

**Chart 1: Actual versus Forecasted Energy Savings PY5 through PY11**

In addition, the Home Energy Check-Up Program has failed to be cost effective in Program Years 8 and 9; and is projected by the Company to fail the cost effectiveness test in Program Years 10 and 11. ORS recommends that the company incorporate any necessary changes to improve the cost effectiveness of this program.

## Introduction

South Carolina Electric & Gas Company (“SCE&G”)<sup>2</sup> filed a Request for Approval of its DSM<sup>3</sup> Plan including a DSM Rate Rider and Portfolio of Energy Efficiency Programs with the Public Service Commission of South Carolina (“Commission”) in Docket No. 2009-261-E on June 30, 2009. Nine (9) DSM programs were proposed by SCE&G – seven (7) targeting residential customers and two (2) for commercial and industrial customers. Two (2) settlement agreements – the General Settlement Agreement and the Opt-Out Settlement Agreement – were approved by the Commission in Order No. 2010-472 dated July 15, 2010.

On May 31, 2013, SCE&G filed an Application for Approval to Continue Demand Side Management Programs (Docket No. 2013-208-E) with no change to the DSM Rate Rider and

<sup>2</sup> South Carolina Electric & Gas was acquired by Dominion Energy South Carolina.

<sup>3</sup> DESC refers to the programs as DSM programs, and ORS does the same, even though the programs are better described as energy efficiency programs.

with a revised portfolio of DSM programs. A Settlement Agreement was reached by SCE&G, ORS, the South Carolina Energy Users Committee and Wal-Mart Stores, East and Sam's East, Inc. On November 26, 2013, the Commission approved the Settlement Agreement and ordered the following:

- SCE&G's revised portfolio of DSM programs should be approved as filed;
- SCE&G should retain the authority and flexibility to modify, amend, terminate and/or add any measure or program without seeking prior Commission approval;
- SCE&G should continue to file annual reviews of the programs and program costs with the Commission and ORS;
- SCE&G should review additional programs designed specifically for low-income participants;
- the NLR recovery should be limited to a rolling three (3) year period; and
- the amortization period for the recovery of Program Costs and SSI should be five (5) years.

The Settlement Agreement also provided the option for certain non-residential customers having annual energy consumption of 1,000,000 kWh or more to opt-out of the DSM programs and required that non-residential customers who accepted a DSM rebate from SCE&G remain in the programs for five (5) years from the date of acceptance. Finally, the Settlement Agreement provided that any party could request a review and submit proposed changes to both the mechanism and the portfolio of programs after six (6) years. The Settlement Agreement was approved by the Commission in Order No. 2013-826.

On January 31, 2014, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2014-44-E. After reviewing SCE&G's filing in this case, ORS made several recommendations that were subsequently approved by the Commission. Those recommendations are as follows:

- the elimination of the Residential Energy Information Display Program and Home Performance with ENERGY STAR Program due to the programs' lack of cost-effectiveness;
- the reduction in the recovery of projected NLR by 25% to mitigate costs to ratepayers stemming from participation estimates; and

- the modifications to the Residential ENERGY STAR Lighting Program to ensure that incentives are available to SCE&G customers only, and to reflect changes occurring due to federal standards that are removing certain bulbs from the marketplace.

On January 30, 2015, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2015-45-E. Concerning this case, ORS made the following recommendations that were subsequently approved by the Commission in Order No. 2015-307:

- the limitation of collection of NLR for the Home Energy Report Program to the time the customer is enrolled in the program;
- the elimination of the rebate offered for air conditioners with an energy efficiency rating of 14 SEER or below under the Heating & Cooling and Water Heating Equipment Program;
- encouragement for SCE&G to explore cost-effective methods to increase its energy efficiency efforts and to use the Advisory Group as a resource for program growth and design and to reduce administrative costs associated with the DSM programs; and
- an investigation by SCE&G to address the causes of the large number of opt-outs from the DSM programs by large commercial and industrial customers.

On January 29, 2016, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2016-40-E. ORS recommended that SCE&G update the avoided costs used to compute the benefits and overall cost effectiveness of the programs.

On January 31, 2017, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2017-35-E. ORS recommended that the Commission approve the updated Rate Rider as requested.

On January 30, 2018, SCE&G filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2018-42-E. ORS recommended that the Commission approve the updated Rate Rider as requested.

On January 31, 2019, DESC filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2019-57-E. ORS recommended that the Commission approve the updated Rate Rider as requested.

On June 28, 2019, DESC filed its Request for Approval of an Expanded Portfolio of DSM Programs and a Modified DSM Rate Rider in Docket No. 2019-239-E. A public hearing was held on November 13, 2019, involving the Company, ORS, Walmart, Inc., the South Carolina State Conference of the NAACP, the South Carolina Coastal Conservation League and the Southern Alliance for Clean Energy. The Commission approved, via Order No. 2019-880, the Company's expanded portfolio of DSM programs and approved (with modifications) the Company's requested changes to the DSM Rate Rider. The major changes to the Company's DSM programs and cost recovery mechanism resulting from this case were as follows:

- Two (2) new programs were added to the Company's DSM portfolio – the Residential Multifamily Program and the Municipal LED Lighting Program;
- The Company's SSI was increased from 6% of net benefits to 9.9% of net benefits;
- The Company will amortize program costs over three (3) years rather than five (5) years (SSI continues to be amortized over five years); and
- The Company is to re-evaluate the proposed DSM portfolio under the avoided costs and avoided cost methodology approved in Docket No. 2019-184-E.

On January 31, 2020, the Company filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2020-41-E. ORS recommended that the Commission approve the updated Rate Rider as requested.

On January 29, 2021, the Company filed its Annual Update on Demand Side Management Programs and Petition to Update Rate Rider with the Commission in Docket No. 2021-34-E. ORS, in accordance with the terms of the approved Settlement Agreements, conducted a review of DESC's Filing. ORS's review includes an evaluation of the three (3) major cost components associated with the Company's DSM programs—Program Costs, NLR, and SSI.

Table 2 below illustrates each Program Year since the inception of the programs:

**Table 2: Program Year Timeline**

Program Year	Beginning Date	Ending Date	
1	October 1, 2010	November 30, 2011	
2	December 1, 2011	November 30, 2012	
3	December 1, 2012	November 30, 2013	
4	December 1, 2013	November 30, 2014	
5	December 1, 2014	November 30, 2015	
6	December 1, 2015	November 30, 2016	
7	December 1, 2016	November 30, 2017	
8	December 1, 2017	November 30, 2018	
9	December 1, 2018	November 30, 2019	
10	December 1, 2019	November 30, 2020	"Review Period"
11	December 1, 2020	November 30, 2021	"Forecast Period"

The Company's actual costs were audited for the period December 1, 2019 through November 30, 2020 ("Review Period" or "PY10"). ORS also reviewed the Company's cost projections for the period December 1, 2020 through November 30, 2021 ("Forecast Period" or "PY11").

Table 3 below shows the actual DSM Program Energy Savings, Program Expenses and Administrative Costs for PY1 through PY10.

**Table 3: DSM Program Energy Savings, Program Expenses, and Administrative Costs**

Program Year	MWh Savings	Program Expenses	Administrative Costs
PY1	57,332	\$11,446,748	\$597,187
PY2	110,623	\$16,063,043	\$1,071,356
PY3	105,378	\$19,536,326	\$1,080,699
PY4	96,392	\$16,758,638	\$708,051
PY5	81,293	\$12,680,376	\$551,316
PY6	53,613	\$10,265,667	\$623,653
PY7	55,046	\$12,741,575	\$712,343
PY8	55,843	\$13,585,912	\$1,207,985
PY9	54,252	\$15,254,547	\$1,378,548
PY10	77,668 <sup>4</sup>	\$14,207,713	\$1,057,534

Chart 2 below illustrates the fluctuation of the DSM Program energy savings and the associated Program Expenses for PY1 through PY10.

<sup>4</sup> Pre EM&V actual

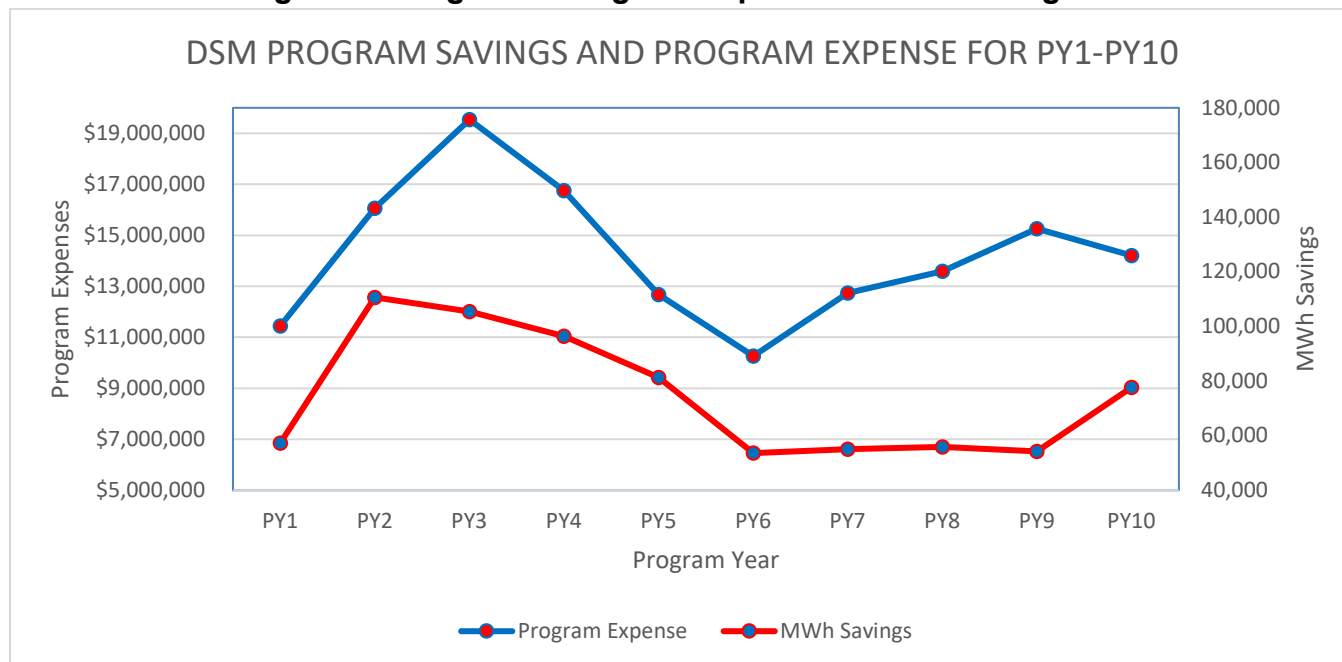
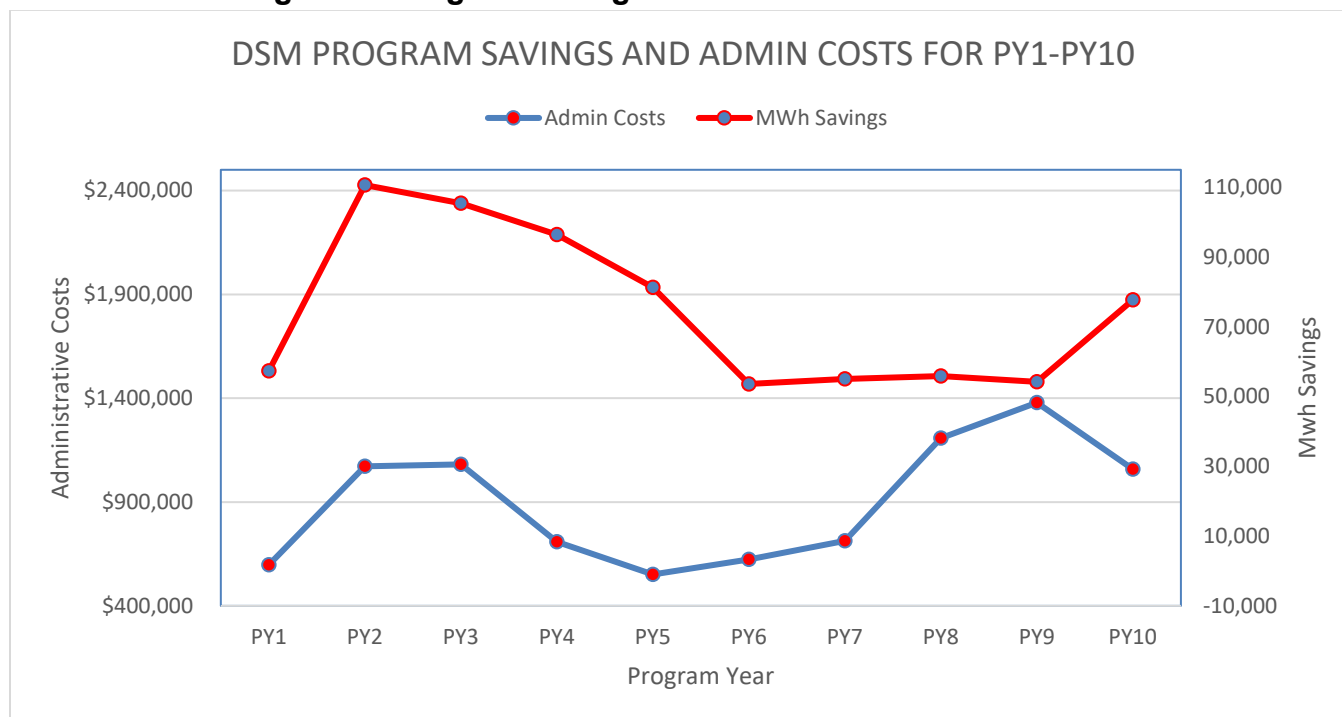
**Chart 2: DSM Program Savings and Program Expense for PY1 through PY10**

Chart 3 below illustrates the fluctuation of the DSM Program energy savings and the associated Administrative Costs for PY1-PY10.

**Chart 3: DSM Program Savings and Program Administrative Costs for PY1-PY10**



## DSM Programs

The Company currently offers ten (10) DSM programs. The programs and the launch dates of each program are shown in Table 4 below:

**Table 4: DSM Programs and Launch Dates**

<u>Residential Programs</u>		
i.	Home Energy Check-Up	10/01/2010
ii.	ENERGY STAR Lighting	02/14/2011
iii.	Heating & Cooling	03/01/2011
iv.	Home Energy Reports	04/06/2011
v.	Neighborhood Energy Efficiency Program (NEEP)	07/30/2013
vi.	Appliance Recycling	10/30/2014
vii.	Multifamily	07/1/2020
<u>Commercial and Industrial Programs</u>		
viii.	EnergyWise for Your Business	10/01/2010
ix.	Small Business Energy Solutions	11/24/2014
x.	Municipal LED Lighting	04/01/2020

During PY10, the Company made the following major changes to its program offerings:

- The Home Energy Reports Program began the transition from an opt-in program to an opt-out program, in which participants are pre-selected by the Company with the ability to opt-out.
- The Home Energy Checkup program was severely limited by the COVID-19 pandemic. However, the Company developed a virtual Home Energy Check-up to allow participation without in-person visits.
- In response to the COVID-19 pandemic, the Company developed an Energy Efficiency kit for the NEEP program that could be delivered without entering homes. A total of 1,143 kits were distributed in Waltherboro and Holly Hill.
- Indoor pickup of appliances in the Appliance Recycling program was suspended due to the pandemic. However, in August the Company introduced a no-contact option to allow the continuation of pickups.
- The new Multifamily Residential program was limited by the pandemic. The Company solicited approximately ten (10) properties but completed installations in only one (1) property.

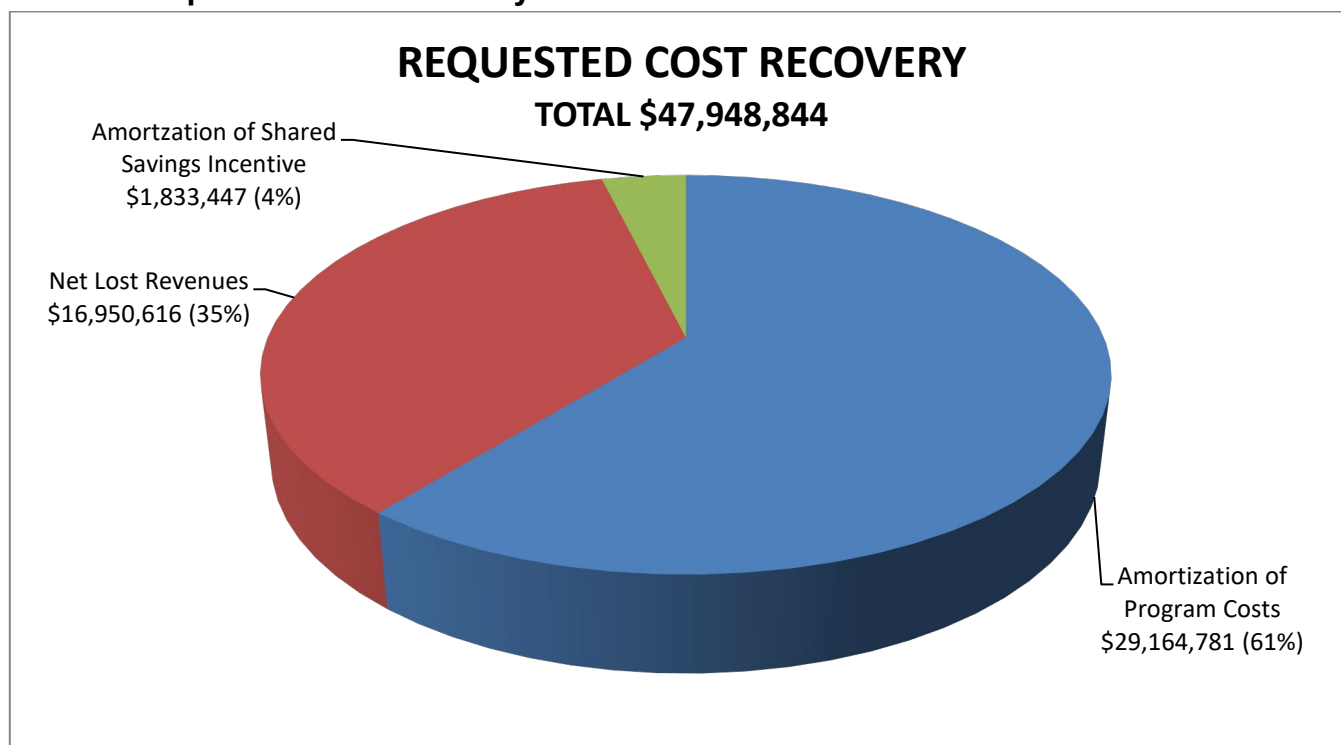
- In the new Municipal LED Lighting program, the Company made twenty-three (23) presentations to prospective customers and signed contracts with nine (9) of those prospective customers.

## DSM Cost Evaluation

The total cost the Company is seeking to recover in this filing is \$47,948,844. For the programs currently in place, the Company estimates that average lifetime costs will be 2.47 ¢/kWh saved.

DESC's amortized Program Costs, with carrying costs, results in a request of \$29,164,781, or 61% of the total requested amount. The Company is requesting \$16,950,616 for NLR, or 35% of the total requested amount. DESC does not amortize its NLR and recoups the total amount during the Recovery Period. Finally, DESC is requesting \$1,833,447, or 4% of the total requested amount as SSI to be amortized over five (5) years without carrying costs.

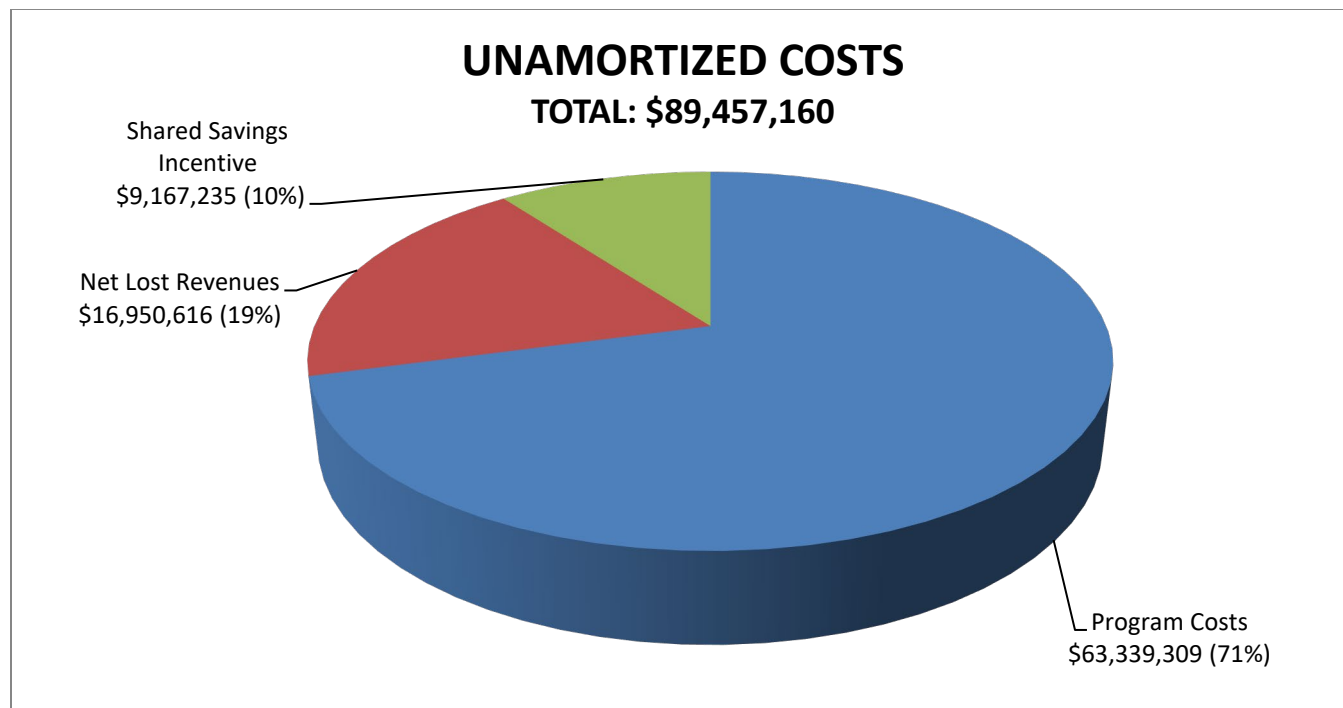
**Chart 3: Requested Cost Recovery**



The total unamortized cost for DESC's programs to date is \$89,457,160. This amount includes the Program Costs balance of \$63,339,309 (71% of the total unamortized cost); NLR of \$16,950,616 (19% of the total unamortized cost); and SSI balance of \$9,167,235 (10% of the

total unamortized cost). The following chart illustrates the proportions of the unamortized costs attributable to the various components.

**Chart 4: Unamortized Costs**



A breakdown of the major cost components of this filing and the development of the billing factors are shown in Exhibit 1. The requested revenues from residential customers are recovered from all residential ratepayers, while the non-residential revenues are recovered from non-residential ratepayers that have not opted out of the programs.

## Advisory Group

The DESC DSM Advisory Group (“Advisory Group”)<sup>5</sup> continues to meet to discuss the status of each program, including preliminary participation statistics, Evaluation, Measurement & Verification (“EM&V”) plans and preliminary EM&V data. The Advisory Group met on May 5, 2020, August 25, 2020, and November 17, 2020. During the meetings, DESC provided updates on the status of the programs, the impacts of the COVID-19 pandemic on the programs, the

<sup>5</sup> The Advisory Group was formed in accordance with Order No. 2010-472 and includes one representative each from the industrial sector, commercial sector, environmental sector, State Low Income Home Energy Assistance Program (LIHEAP) and ORS.

status of the recent Commission-approved program expansion, the results of DESC's avoided cost update, EM&V results for PY9, and issues concerning low-income participants.

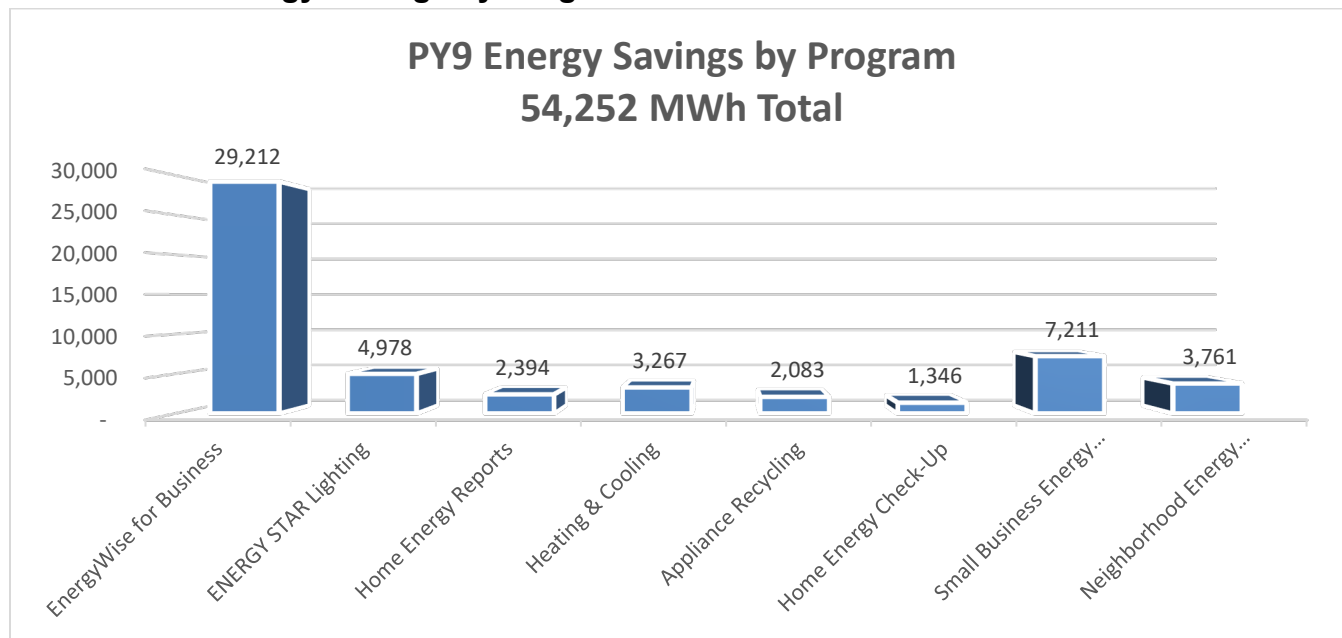
## Evaluation, Measurement & Verification

In May 2020, the Company filed its EM&V Report for PY9. The EM&V Report is the basis for the latest true-ups of NLR and the SSI included in the filing. To date, the Company has utilized EM&V results to true-up NLR and the SSI for PY1-PY9. The EM&V Report for PY10 should be available in May 2021, providing data for true-ups of PY10 in the January 2022 filing.

According to the PY9 EM&V Report, the Company spent 110% of projected Program Costs and achieved 54,252 megawatt hours ("MWh"), or 76% of projected energy savings in PY9. Three (3) of the Company's eight (8) programs active in PY9 achieved energy savings well in excess of forecast in PY9, while the EnergyWise for Your Business program provided 54% of the total energy savings. According to the Company, the 24% shortfall in energy savings in PY9 is primarily due to a change to the baseline for lighting programs. Previously the baseline for energy savings was based on incandescent lighting – the baseline has now moved to halogen lighting, resulting in lower reported savings. The Company is projecting strong energy savings growth of 77,668 MWh in PY10.

Chart 6 below illustrates the relative energy savings by program for PY9.

**Chart 6: PY9 Energy Savings by Program**



## **Estimates Used in the Filing**

For PY10 and PY11, all program avoided energy amounts, avoided capacity amounts, NLR, and SSI are projections that were developed using the ICF International ("ICF") DSM Planning Model. Thus, all the dollar amounts in the filing, with the exception of the program costs in the Review Period and trued-up amounts in PY9, are estimates. These values and dollar amounts are to be trued-up in future filings based on EM&V results. ORS reviewed the data and assumptions used in the ICF DSM Planning Model and tested certain changes in the data and assumptions. ORS finds the ICF DSM Planning Model to have produced reasonable estimates for the DESC DSM programs.

## **Forecasted Retail Sales**

The Company utilized its most recent short-term sales forecast to compute the DSM Rate Rider in this filing. This forecast is the same forecast DESC used during its 2021 Annual Fuel Filing. As such, ORS is familiar with the methodology used to generate the sales forecast and finds it to be a reasonable approach to establish rates.

## **Energy and Peak Demand Savings**

The Company projects that during the Forecast Period the DSM programs will reduce annual electric usage by 94,869 MWh. These are noteworthy savings and, if achieved, may provide DESC the ability to avoid or defer outright power purchases or the construction of a portion of required new generating facilities.

## **Opt-Outs**

The Opt-Out Settlement Agreement allows all industrial customers to opt-out of the DSM programs (and not pay the DSM Rate Rider) by notifying the Company in writing that the customer does not wish to participate in the Company's programs and has or will implement alternative DSM programs at its own expense. Beginning with PY4, large commercial customers also have the ability to opt-out of the DSM programs in accordance with the terms of the Settlement Agreement approved in Commission Order No. 2013-826. At the end of PY10, 407 large commercial and industrial accounts had opted-out of DESC's DSM programs, representing 22% of the Company's retail electric load. This represents an improvement over PY9, in which 438 large industrial and commercial accounts had opted-out, representing 23% of the Company's retail electric load.

## DSM Rate Rider

Table 5 below compares previous and existing DSM rates to those currently requested by DESC:

**Table 5: Previous Approved and Requested DSM Rates**

DSM Rider Class	Approved 2019 Rate (¢/kWh)	Approved 2020 Rate (¢/kWh)	Requested 2021 Rate (¢/kWh)	Percentage Change in 2021 over 2020 Rate
<b>Residential</b>	0.184	0.220	0.244	+11%
<b>Small General Service</b>	0.274	0.402	0.500	+24%
<b>Medium General Service</b>	0.176	0.261	0.307	+18%
<b>Large General Service</b>	0.093	0.116	0.131	+13%

The Company's requested rate change would increase the bill of an average residential customer using 1,000 kWh per month by approximately \$0.23. According to the Company, the primary factor driving the increases in the DSM Rate Riders is the "vintaging of program costs," which was approved in Commission Order No. 2019-880.

## Conclusion and Recommendations

ORS is concerned that in recent years, since PY4, the Company's actual energy savings have fallen well short of the Company's projections of energy savings. ORS recommends that the Company re-visit the methodology used in establishing energy savings projections to ensure better alignment of actual energy savings with projections in the Company's future filings.

ORS is also concerned that the Home Energy Check-Up program has failed to be cost effective in Program Years 8 and 9; and is projected by the Company to fail the cost effectiveness test in Program Years 10 and 11. ORS recommends that the company incorporate any necessary changes to improve the cost effectiveness of this program.

ORS finds the updated DSM Rate Rider to be developed in accordance with the terms and conditions set forth in Commission Order Nos. 2010-472, 2013-826, and 2019-880.

DESC Revenue Request for Demand Side Management Programs  
For the Recovery Period of May 2021 - April 2022

	Residential	Small General Service	Medium General Service	Large General Service	Total
<b><u>Program Costs:</u></b>					
Vintages PY1-PY9 Balance as of April 30, 2021	\$22,877,399	\$12,917,255	\$6,307,303	\$6,208,115	\$48,310,072
One Year Amortization (over remaining two years)	\$11,438,699	\$6,458,627	\$3,153,651	\$3,104,058	\$24,155,035
Vintage PY10 Balance as of April 30, 2021	\$7,087,337	\$5,795,205	\$1,246,878	\$899,817	\$15,029,237
One Year Amortization (over three years)	\$2,362,446	\$1,931,735	\$415,626	\$299,939	\$5,009,746
Total Amortization of Program Costs for Rate Calculation	\$13,801,145	\$8,390,362	\$3,569,277	\$3,403,997	\$29,164,781
<b><u>Net Lost Revenues for December 1, 2018 through November 30, 2022</u></b>					
Cumulative Energy Savings (kWh)	78,637,000	94,201,161	30,933,742	23,017,097	226,789,000
Net Lost Revenue Factors (\$/kWh)	\$0.09490	\$0.08628	\$0.06266	\$0.03702	
Estimated Net Lost Revenues	\$7,462,651	\$8,127,676	\$1,938,308	\$852,093	\$18,380,728
True-up for PY9	(\$1,602,479)	\$557,710	(\$77,787)	(\$307,556)	(\$1,430,112)
Net Lost Revenues for Rate Calculation	\$5,860,172	\$8,685,386	\$1,860,521	\$544,537	\$16,950,616
<b><u>Shared Savings Incentive:</u></b>					
Cumulative Shared Savings Amortization through PY11	\$619,505	\$902,203	\$298,093	\$210,301	\$2,030,102
True-up for PY9	(\$226,593)	\$93,069	\$10,622	(\$73,753)	(\$196,655)
Shared Savings Amortization for Rate Calculation	\$392,912	\$995,272	\$308,715	\$136,548	\$1,833,447
<b><u>DSM Rate Rider</u></b>					
Amortization of Program Costs	\$13,801,145	\$8,390,362	\$3,569,277	\$3,403,997	\$29,164,781
Net Lost Revenues	\$5,860,172	\$8,685,386	\$1,860,521	\$544,537	\$16,950,616
Amortization of Shared Savings Incentive	\$392,912	\$995,272	\$308,715	\$136,548	\$1,833,447
Total Requested Recovery	\$20,054,229	\$18,071,020	\$5,738,513	\$4,085,082	\$47,948,844
Projected Sales (GWh)	8,207.10	3,617.80	1,867.00	3,112.20	
DSM Rate Rider (¢/kWh)	0.244	0.500	0.307	0.131	